

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022279**Date Inspected:** 22-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai**CWI Name:** Tian Lei, Liu Fa Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

SMAW welding of fillet welds located on Bike Path Handrail component identified as BKR-NS-3 for miscellaneous 4mm welds attaching P-45 to P-171 and P-171 to P-40 parts. Welder is identified as welder no. 049769. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2112.

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 20TR2-044 for weld(s) 009, 011, 013, 015, & 017. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-461.

SMAW welding of complete joint penetration welds located on Traveler Rails component identified as 20TR2-036 as identified on weld repair data sheet B-WR-20481 for repaired complete joint penetration welds identified as weld no.(s): 009. Welder is identified as welder no. 049769. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-SMAW-1G(1F)-repair.

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SMAW welding of complete joint penetration welds located on Traveler Rails component identified as 20TR2-036 as identified on weld repair data sheet B-WR-20481 for repaired complete joint penetration welds identified as weld no.(s): 017. Welder is identified as welder no. 054467. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-SMAW-1G(1F)-repair.

SMAW welding of complete joint penetration welds located on Traveler Rails component identified as 20TR2-037 as identified on weld repair data sheet B-WR-20481 for repaired complete joint penetration welds identified as weld no.(s): 009. Welder is identified as welder no. 049769. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-SMAW-1G(1F)-repair.

SMAW welding of complete joint penetration welds located on Traveler Rails component identified as 20TR2-036 as identified on weld repair data sheet B-WR-20481 for repaired complete joint penetration welds identified as weld no.(s): 011. Welder is identified as welder no. 054467. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-345-SMAW-1G(1F)-repair.

Bay Number 8

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. All components were as listed on NWIT notification no. 08593. The member(s) is/are identified as OBG Bike Path and Sub Assembly components as identified below with the following identifying weld no.(s):

1. BK4A-062-112, 115, 118, 121, 122, 125, 128, & 131.
2. SA7047-001 and 002.
3. SA7535-001 and 002.

SMAW welding of plug welds located on Bike Path component identified as BK004A2-060 weld no.(s) 014, 015, 017, 019, & 020. Welder is identified as welder no. 037840. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2112-plug.

FCAW welding complete joint penetration welds located on Bike Path component identified as BK004A2-062 weld no.(s) 002, 008, 013, & 021. Welder is identified as welder no. 219414. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2132-ESAB.

FCAW welding complete joint penetration welds located on Bike Path component identified as BK004A6-062 weld no.(s) 001, 002, 007, & 165. Welder is identified as welder no. 054459. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2232-ESAB.

FCAW welding complete joint penetration welds located on Bike Path component identified as BK004A8-062 weld no.(s) 001, 002, 007, & 130. Welder is identified as welder no. 046706. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2232-ESAB.

Unless otherwise noted above all items observed on this day appeared to be in general compliance with the

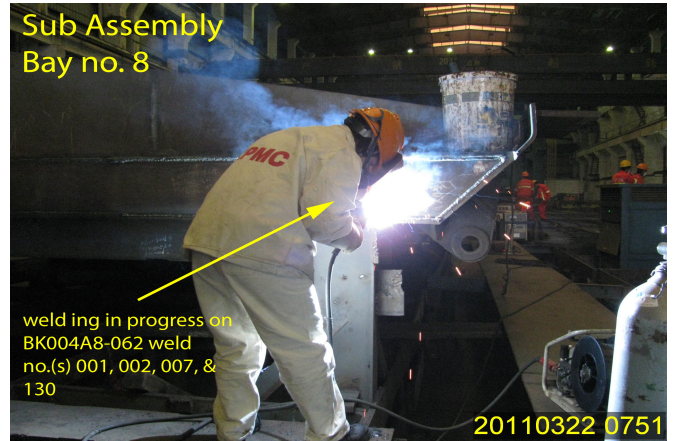
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applicable contract documents



### Summary of Conversations:

Pertinent conversations are included in the body of the report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Hernandez,Rene

Quality Assurance Inspector

**Reviewed By:** Hall,Steven

QA Reviewer

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